Digitized by the Internet Archive
in 2018 with funding from
University of Toronto

https://archive.org/details/medjournalApr1955uoft

UNIVERSITY OF TORONTO
MEDICAL JOURNAL

ESTABLISHED DECEMBER 1923
AN UNDERGRADUATE PUBLICATION

VOLUME XXXII NUMBER 6
TORONTO, APRIL 1955

GENERAL PRACTICE

Faculty Advisor ..... W. V. Johnson, *B.A., M.D.*
Executive Director of the College of General Practice of Canada.

Editor-in-Chief ..... J. W. Goodwin 5T5

Managing Editor ..... J. Q. Bliss, B.A. 5T6
Associate Editors ..... W. H. McCrae 5T5
W. J. Kokeny 5T5

Assistant Editors ..... V. J. Butler 5T5
Miss D. W. Johnson 5T5
W. H. Shaw 5T5
R. E. White, M.A. 5T6

Abstracts and Review Editors ..... J. D. T. Ainslie 5T5
D. W. Wilson 5T5
I. G. L. Van Praagh 5T5

Editorial Assistants ..... M. F. McDowell 5T6
J. Morgan 5T6
K. O. McCuaig 5T7
J. C. Alexander 5T8
W. C. Proctor 5T9
P. Dent 6T0

Advertising Managers ..... A. C. Strickler 5T8
M. A. Tyber 5T8

Circulation Staff ..... P. C. F. Moore 5T9 (Manager)
Miss S. J. Saunders 5T9

This Journal is published six times a year from November to April, by the Medical Society of the University of Toronto, to serve primarily as a medium for student expression.
Subscription Rates: $3.50 for one volume of six consecutive issues. Single copies 65¢.

Information to Contributors

Manuscripts including references and footnotes should be typewritten double spaced on one side of the paper. References should be kept to a minimum and should be cited numerically in the order in which they appear in the text.

Illustrations are included by arrangement with the Editor. Drawings should be done on white paper in black ink.

Final copy date is the 15th of the month before the issue concerned.

Material printed in this journal is covered by copyright. Articles are accepted for consideration with the understanding that they are contributed for publication in this journal only.

Correspondence should be addressed to Room 114, Medical Bldg., University of Toronto, Toronto 5, Ontario.

EDITORIALS

They also serve

In a few short weeks the Class of 5T5 Meds will graduate. We hoary veterans of six long years of paying, listening, writing, reading, clock-watching, yawning, sleeping, spilling, breaking, cooking, dissecting, culturing, waiting, standing, peering, prodding, percussing, hedging, squirming, shovelling, partying, recuperating, bridge-playing, speech-making, cramming, padding, and (barely) passing, beg the indulgence of the junior years while we reminisce about associations with such friends of the student as . . .

. . . Miss Russell, who has had a cheery smile for every student to walk into the Medical Office in over thirty-five years. Her astounding ability to recall the names and faces of all these graduates is a real compliment to any who return to their alma mater after years of absence.

. . . George Ross, the ever-pleasant and obliging caretaker of the Anatomy Building.

. . . Harry Whittaker, the senior Histology technician, who would always allow us a few precious seconds extra searching a bell-ringer slide.

. . . Mr. Hart, that kindly gentleman whose ready assistance to students and clinicians alike has been a real service for thirty-two years.

. . . Jack Martin, Esq., philosopher, poet, psychologist, father confessor, and proprietor of "one of the nation's most unusual eating places".[1] Forever the cheerful "prophet of doom"[2], Jack has buoyed up sagging spirits while serving coffee so fine that "a dime hardly seems enough to ask, Doctor!"[3]

They will be remembered with fondness for many years to come.

1. Hines, Dunkin': Amarica's Finest Eateries, 10th Edition; Ptomaine Publishing Co., New York, 1904.
2. Falstaff, Jack, in Shakespeare, W. "Henry IV, Part I"; London, 1597.
3. Martin, Jack: Personal Communication, 1955.

Conclusion

Volume XXXII concludes with this issue. It is our opinion that the change in policy instituted last Fall injected new life into the Journal. Reader interest as evidenced by student comments and graduate letters has indicated that topical issues of the type published this year are received very favourably. Particularly satisfying to note was the greatly increased number of student contributions. Advertising continues to be a major problem but this has been offset by a significant rise in circulation. (70% increase over Volume XXXI) Generally, the financial situation is excellent.

We are very pleased to announce the appointment of Mr. J. Q. Bliss, Meds 5T6, as Editor-in-Chief of the Journal for 1955–56. His experience and executive ability assure success for Volume XXXIII. No change in present policy is planned and already several articles for topical issues have been arranged.

All in all, this has been a year of definite progress for the Journal and the Editor wishes to acknowledge the consistent effort and cooperation given him by the members of the staff. Certainly, without their assistance, such progress would have been impossible.

A SURVEY OF GENERAL PRACTICE

THE EDITORS and W. V. JOHNSTON, B.A., M.D.*

IN all probability, approximately 60% of this year's graduating class will become family doctors and yet most final year students have very little practical knowledge of this field. For this issue of the Journal, we decided to conduct a survey of general practice from the students' point of view, i.e. a survey concerned with the initiation and location of a general practice. To this end, we compiled a poll of 27 detailed questions suggested by final year students to be answered by a carefully selected group of family doctors. Selection was made on the basis of geographical distribution and known interest in general practice education.

The response to this questionnaire was enthusiastic and many varied and astute answers were received. These answers were critically analysed and the following comments are both the results and the conclusions which were drawn. Some of the more unusual answers are quoted.

In order to add the weight of experience to this survey, we have asked Dr. Victor Johnston, the Executive Director of the newly formed College of General Practice of Canada and one of the country's best known family doctors, if he would comment on any of the following remarks. Dr. Johnston's comments (such as the following) have been set down in italics.

This thoughtful questionnaire was mailed to a number of general practitioners in Ontario. The number of doctors receiving them was not large enough for a significant statistical study. However, the replies are very interesting and worthy of a descriptive analysis. This report has been compiled by the students themselves: these comments of mine are in no way a judgment of them.

1. WHAT FACTORS DO YOU THINK SHOULD INFLUENCE THE MATURE DECISION TO ENTER GENERAL PRACTICE?

The answers given to this question were both thoughtful and varied. As expected, roughly half the doctors stated that genuine interest in people is essential. However, some referred to this as a love of people and a desire to give service to a community, while others took a slightly more practical approach, stating that it should be an interest primarily in people as opposed to academic or technical medicine.

A desire for a variety in the everyday problems of medical practice was mentioned by many. One doctor restated this in a slightly negative way as an unwillingness to spend much postgraduate training time in any one field.

Approximately one-third stated that financial necessity and/or a new family might necessitate the entry into general practice, for a few years at any rate.

A few mentioned the advisability of good health and stamina to withstand the strain of a heavy practice.

Apparently one factor to be considered in the decision is the desire for a wide choice of location, particularly if a country or small town practice is appealing.

One or perhaps two years in general practice as an assistant to a good family doctor was recommended as a very suitable preparation for specialty training.

One doctor referred to a specific interest in families as units of medical practice.

*Executive Director of the College of General Practice of Canada.

Willingness to work long hours for less return and the tolerance of the doctor's wife as well as the doctor himself at the prospect of a constricted social and family life were considered essential.

One man describes "The desire . . . . . to become part of the lives of a cross section of all social and economic types of individuals and families."

Another cautions that a perfectionist should not contemplate general practice. With tongue perhaps not too far in cheek, one doctor suggests "an innate dislike of sleep."

The replies to this question indicate that the competent general practitioner of today is a personal physician; a specialist in the medical management of families, if you will. He is the patient's dependable link to all of medicine. Looked at in another way, the prospective general practitioner should want to place more emphasis on the patient as a human being than on the patient as a disease.

The family doctor must desire to be a good diagnostician. Indeed, as one doctor answering this questionnaire put it, he must have a passion for accurate diagnosis. One of our ablest family doctors has stated that the College of General Practice should have as its primary aim, "intensive training in the diagnosis of all conditions for which there is a specific treatment."

2. AT WHAT POINT IN ONE'S UNDERGRADUATE OR GRADUATE CAREER SHOULD THIS DECISION BE MADE?

The great majority recommended that this decision should be made either in the final undergraduate year or before the end of the junior rotating interneship. Some of the men suggested that some time as an assistant should be spent before the decision can be made positively.

It would seem apparent that there are really two decisions here: 1. To sample general practice as an assistant in order to see the problems involved.

2. To remain in general practice after this preliminary trial if satisfactory.

3. HOW MUCH TIME SHOULD BE SPENT IN TRAINING BEYOND THE STANDARD YEAR OF ROTATING INTERNESHIP?

Approximately one half the doctors suggested one further year. Roughly one-quarter thought two years more advisable. One recommended two years for a tentative rural practice with one or none in preparation for city practice. A few thought that there was really no need for further training, but it is interesting to note that they were all city practitioners.

One doctor recommended that the aspiring family doctor take two years as an assistant then return for a year of hospital training in a field in which he found himself most inexperienced.

A difference of opinion exists among family physicians regarding interneship training for general practice, depending somewhat on the location of their practice. The College of General Practice strongly recommends a second year interneship. If this is impossible, the second choice would be a year with a senior practitioner. The College believes that launching into general practice alone after one year of general interneship is too difficult. Several of those who have done this recently stated that they are augmenting their education with frequent consultations. Surely this is asking the public to pay for their postgraduate training to an unreasonable extent.

4. IF YOU WERE TO SET UP A GENERAL PRACTICE INTERNESHIP TO AUGMENT THE TRAINING RECEIVED IN A JUNIOR INTERNESHIP, WHAT ROTATIONS WOULD

YOU INCLUDE AND HOW MUCH TIME WOULD YOU ALLOT TO EACH?

Many of the city men answering this question recommended a year divided equally between medicine, obstetrics and paediatrics. (The Toronto General Hospital offers such an interneship). A few advised a longer total period.

One city man suggested three three-month periods on the above rotations with the remaining three months to be spent as a trainee-assistant with a senior family physician. Another wanted this same remaining three-month period spent on orthopaedic and emergency surgery. A few of the city men strongly advised that a good deal of the extra year be spent in the out-patient department of the hospital.

Most of the country doctors suggested more surgery (2–8 months) in combination with medicine and obstetrics. One mentioned eight months of each. Training in emergency work and fracture management was stressed.

From one to three months on the ENT service was suggested for country practice in combination with medicine, obstetrics and surgery in varying amounts.

A few men recommended anaesthesia and/or psychiatry for short periods of six weeks or so.

The College of General Practice recommends the following program for a second year interneship. Some ten hospitals in Canada with residencies in general practice or their equivalent are cooperating with the College in developing this program.

1. *Three months medicine including dermatology.*
2. *Three months obstetrics and gynaecology.*
3. *Three months general and emergency surgery, including urology and ENT.*
4. *One month anaesthesia.*
5. *Two months paediatrics.*

If the last (No. 5) is unavailable, then four months can be allowed for each of medicine and obstetrics.

6. *A praeceptorship program to follow immediately or actually included in this extra year.*

It is further recommended that the second year be recognized as a residency or assistant residency and that a suitable certificate be presented to the trainee on satisfactory completion. (More details of this programme are given following this article.)

5. ONCE IN PRACTICE WHAT STEPS DO YOU RECOMMEND FOR KEEPING INFORMED OF ADVANCES BEING MADE EACH YEAR IN THE VARIOUS SPECIALTIES?

Almost all the men stress good medical journals as one of the best ways to keep posted considering the time available to most family doctors.

Many recommended a good post-graduate course every year, such as the one organized by the O.M.A. or those being offered by the New York Polyclinic and Cook County Hospital in Chicago. A few men suggested that *two* of these seven to ten day courses be taken each year.

Roughly one-third of the doctors gave a boost to the annual O.M.A. and C.M.A. conventions, but well over half endorsed local medical society meetings. In many instances, this meant the meetings of the Academy of Medicine in Toronto.

A few suggested that hospital rounds, particularly those in the smaller hospitals, were very informative.

Some of the city men have appointments to a well staffed OPD in a large general hospital and recommend this

as a good method of keeping in touch.

One advised reading on one's own cases as something not usually done. Another endorsed conferences with the occasional drug-house detail man.

The College of General Practice requires one hundred hours every two years for maintenance of membership as follows:

25–40 hours formal training at post-graduate courses by recognized medical instructors

10–25 hours scientific courses at medical conventions

50 hours hospital rounds, medical papers submitted, reading clubs, etc.

6. WHAT MEDICAL JOURNALS DO YOU CONSIDER MOST INFORMATIVE FROM THIS STANDPOINT?

The following medical journals were mentioned in order of preference: Canadian Medical Association Journal, Modern Medicine of Canada, Medical Clinics of North America, Postgraduate Medicine, Journal of the American Medical Association, New England Journal of Medicine, Surgical Clinics of North America, British Medical Journal, American Journal of General Practice, Practitioner, Medical Annual, International Medical Digest, Lancet and the Ontario Medical Review. Two Toronto graduates loyally nominated the University of Toronto Medical Journal.

7. ANYONE INTENT ON STARTING IN GENERAL PRACTICE WILL WANT TO KNOW WHAT ARRANGEMENTS CAN BE MADE. THE USUAL ARRANGEMENTS ARE THESE:

(A) STARTING IN PRACTICE FOR ONESELF

(B) STARTING WITH PARTNER WHO IS RECENT GRADUATE

(C) STARTING AS ASSISTANT TO OLDER ESTABLISHED PRACTITIONER WITH VIEW TO FUTURE PARTNERSHIP

(D) STARTING AS AN ASSISTANT FOR ONE OR TWO YEARS AND THEN SETTING UP PERMANENTLY SOMEWHERE ELSE AT A LATER DATE

(E) STARTING IN A GROUP PRACTICE

WHICH, IN YOUR EXPERIENCE, IS THE PREFERABLE ARRANGEMENT AND WHY? (GIVE ADVANTAGES AND DISADVANTAGES.)

Because we feel that the men being canvassed in this questionnaire are, on the average, an older group, views on group practice have not been stressed as they might be.

The great majority of the men (city or country) stressed independence and favoured the arrangement in (A), that of solo practice, or in (D). The group favouring (D) thought that it was obviously preferable if the doctor was financially unable to start up by himself. They also stress its educational value, but maintain that it should definitely be terminated in favour of independent practice elsewhere. In other words, it serves only to set the young doctor on his feet for a lifetime of solo practice. The men answering in favour of either (A) or (D) seemed prepared to sacrifice most planned holidays, some postgraduate training courses, and a good deal more sleep, in order to secure independence and a practice relying on *one* man's initiative.

Most of the doctors agreed that the most intimate doctor-patient relationship is possible in solo practice. The necessity to make up one's own mind, a greater income than in group practice, the fact that the doctor is responsible for no one else's work; the fact that the solo practitioner is perhaps a more distinct part of the community: these were the more frequently mentioned advantages of solo practice.

Some suggested that the arrangement of signing out to a neighbouring physician was a better alternative and less complicated than having to join a group with its disadvantages in order to do the same thing.

The following were suggested as real disadvantages of solo practice: The doctor tends to work too hard. There is no real provision for adequate rest if he is even mildly ill. It is more difficult for a man working alone to check his own work and the responsibility for twenty-four hour service to a community can be very difficult. Solo practice is hard on the family and social life of the doctor and his wife. There is no consultation on minor perplexing problems which do not warrant a formal consultation. The doctor must pay the total office expenses. If the solo doctor is interested in a particular problem, he is usually too busy to delve into it or to write on it for a journal.

Some of the younger men answering the poll have experience with group practice and definitely favoured this arrangement. One stressed that the degree of independence of the physicians in the group would dictate its success. He emphasized that each doctor should have his own practice within the group and that *none* should be on a straight salary basis.

If personal compatibility can be achieved, these men maintain that the group is the ideal way to practice general medicine.

The increased time off for leisure and for postgraduate courses as well as the more regular hours were stressed by almost all the men as the distinct advantage of group practice. Many spoke of the benefit of active discussion of cases with other members of the group, particularly on minor problems which did not really warrant a consultation from outside the group. The sharing of responsibilities was mentioned by many.

Some of the men felt that group practice insured better service to the community. A few mentioned the laboratory or diagnostic equipment (ECG, x-ray, etc.) which could be purchased by splitting the cost among group members. Some larger groups can support one or two consultants (a surgeon and/or an internist usually) and the ready availability of these men was mentioned. The sharing of office help and the establishment of group pension and disability plans were also mentioned.

The fact that it can be seriously harmed or dissolved by personal incompatibility was almost unanimously suggested as the major disadvantage of group practice. Loss of initiative was feared by a few. Another point was that the patients were not satisfied to be transferred from doctor to doctor within the group.

It would appear that group practice sacrifices some of the human aspect or the doctor-patient relationship for a somewhat more efficient system. Group practice is consolidated in that it does not depend solely on the capabilities and the health of *one* man.

Another group of recent graduates preferred practicing with a partner in their own age group. This is a relatively new trend and consequently the answers received were not quantitatively representative. Usually the two are friends from medical school and by starting in together each can achieve the same amount of public approval, other things being equal.

Two recent graduates in practice together boast of equal time off and an equal share of the profits. One is not the work horse of the other. Obviously, each knows the likes and dislikes of the other and this does away with many of the complaints of partner practice.

A few of the men favoured assistantship with an older man with a view to future partnership (arrangement "c"). This seemed to be based entirely on the existence of good personal relations, i.e. the permanence of such an arrangement depends upon the compatibility of principal and assistant. These men were willing to forego the pleasure of building up their own practice.

Finally, as one man puts it, "No one can practice completely solo. There are other GP's in the district and you must work harmoniously with them for all the patients to observe. Independence is a sweet feeling but it can be very lonely."

During the past five years in Ontario partnerships and small groups have increased from 85 to 205 or more. Personalities must be compatible for the success of group practice. This is the most important factor. Group and partnership practice does permit more rest and more study. In one group of four in Canada this is carried to the point where only three are working at one time. Each man is away on holidays or on postgraduate study every four months. In another group, each member has one free day each week to visit hospitals in a neighbouring city. Such devotion to postgraduate study must have some profound effects on the quality of practice. On the other hand, solo practice has many appealing features. It gives the maximum independence and the human aspect of the doctor-patient relationship may be developed to the highest degree. I think it is true that more and more of the doctors who practice alone are making arrangements with their colleagues to look after the practice while they are on holidays.

8. WHAT IS THE MOST PRACTICAL SOURCE FOR FINANCING ENTRY INTO GENERAL PRACTICE?

Almost any source is regarded as a practical one, although loans from family and banks, and mortgages are mentioned most frequently.

9. DO YOU THINK A RECENT GRADUATE SHOULD BUY A PRACTICE NOWADAYS?

The almost unanimous answer to this question was that a practice could not, and should not, be bought no matter what the location. One man stressed that only the property could be bought, but *never* the patients.

10. WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF THE COMMUNITY IN WHICH YOU PRACTICE?

GROUP I: (ACTUAL RANGE OF POPULATION 750–4,500)

Men in the villages and generally rural situations stated that the homogeneous character of their communities lends itself well to good family practice. "Knowing that there are very few better places": these men have a real pride in their own community. Many find that the people in these rural areas are more cooperative and appreciative. One stated that it was very pleasant to drive along uncongested roads, while the proximity of some of these communities to a large city was a real advantage, i.e. most of the city's benefits and few of its faults. The doctor-patient relationship is much better developed in a smaller place as the doctor knows a greater percentage of his patients on a personal basis. One suggested that the doctor in such a situation will live longer.

These doctors have few faults to find with their communities, especially if

they are reasonably close to a large city. Transportation during snow storms and, if the practice is any distance from a large city, the lack of recreational facilities were mentioned as real disadvantages. Lack of readily available consultant services (if really isolated) and the inadequacy of hospital facilities (nursing, blood bank and laboratories deficient or absent), were mentioned.

GROUP II: (ACTUAL RANGE OF POPULATION 8,000–220,000)

Naturally more surgical and medical specialists will be attracted to a large town or a city of this size. There are larger hospitals, and a greater association with expert opinion at rounds, society meetings, consultations, etc. Thus this situation has increasing benefits for the local general practitioner, but still retains a modicum of small town friendliness and spirit. This combination of advantages would really depend on the population of the centre, of course.

One man stated that he did not feel absolutely essential to a community as large as this, and another lamented the fact that the city in which he practiced was not a teaching centre. One man stated that some of these medium sized centres suffered from some medical overpopulation.

GROUP III: (TORONTO AND ENVIRONS)

There were much more definite advantages and disadvantages mentioned for this location than for the others. On the one hand, the general physician is nearer special clinics, out-patient departments, good laboratory facilities, and the best of expert opinion. One man observed "the mass of people from which to build a practice." The ready availability of postgraduate education was mentioned many times. Naturally, social life is enhanced by good entertainment and cultural facilities. Another stated that a city man does actually know city people better. Suburbs were likened to small towns near a large city.

The proximity to a greater number of doctors for meetings and for friendship was suggested, and apparently one can more easily find another doctor to sign out to in the city. The essentially stable economy of the city as opposed to a one- or two-industry town was another advantage mentioned.

On the other hand, people in large cities are definitely specialist-conscious and some will bypass the general practitioner at the slightest indication of serious illness. A city population is constantly changing and too often the doctor does not come to know his patients personally. One doctor stated that the free medical clinics were too close and this deprived him of many potential patients. Many felt it was too hard to become established in the centre of a large city, but not too much trouble in some suburbs. The cost of living is higher in a large city like Toronto. Another man complained that a general practice was not complete in a city and little more than "minor minor surgery" could be done. The traffic apparently makes the distance between a suburban office and a downtown hospital much greater.

A senior physician with a history of having had three years interneship, seven years in rural practice, and now in a city, states that, "In a small place you think out the unusual problem and the emergency farther, and in so doing become more resourceful and develop confidence in your own judgment."

11. WERE YOU RAISED IN A COMMUNITY SIMILAR TO THE ONE IN WHICH YOU PRACTISE? SHOULD THIS BE A FACTOR IN THE DECISION TO PRACTISE IN A CERTAIN COMMUNITY?

Almost exactly half of the doctors polled were raised in the community in which they now practise, and the other half were not.

There is no general agreement as to whether this should be a factor to locate in a certain area, although some emphatic opinions were expressed. It is apparent that the individual decides this himself.

In choosing a location, I believe that it is true our young doctors are thinking more of where they and their wives want to live and raise their families than did the graduate of twenty-five years ago. Also, more of them are planning to start where they wish to live permanently. As indicated by the above results, many who were raised in the country choose the city to practice in, and probably just as many city men choose smaller places.

12. WHAT TYPE OF OFFICE DO YOU RECOMMEND INITIALLY? SHOULD IT BE LOCATED IN THE RESIDENCE? HOW LARGE SHOULD IT BE AT FIRST? WHAT PROVISIONS SHOULD BE MADE TO ENLARGE IT?

The majority prefer starting out with the office in the residence, although several pointed out the inconvenience of this to the family. As one man puts it, "I started in an office attached to a residence—I like it—wife does not." Most prefer starting with a small to medium sized office, although several pointed out that *enlargement is expensive and should be foreseen from the start.* It is the general consensus of opinion that the first office should consist of a waiting room, small laboratory, consulting room and examining room. The latter two may be combined. One man recommended a *small* waiting room, "because a full waiting room is a doctor's best advertisement." Another suggestion which is not often thought of is that of a small washroom for the convenience of the patient.

13. WHAT EQUIPMENT SHOULD THE MAN PRACTICING ALONE BUY AT FIRST FOR THE OFFICE? WHAT ARRANGEMENTS CAN BE MADE TO PAY FOR THIS OVER AN EXTENDED PERIOD OF TIME? DEPENDING ON LOCATION WOULD YOU RECOMMEND ANY SPECIAL EQUIPMENT (FLUOROSCOPE, DIATHERMY, ECG, ETC.)?

Required office equipment and furnishings include:

Furniture
Suturing material and bandages
Scales
Rubber gloves
Microscope and blood counting equipment
Urinalysis and ESR equipment
Injectible and emergency drugs
Catheters
Sterilizer
Simple instruments for very minor surgery

The great majority think it unnecessary to have any of the special instruments mentioned at first, although many stated that a diathermy is a very useful and much-employed piece of equipment. They recommend that any of these be purchased as the need arises and as bank balance permits. As for financing these purchases, many mentioned that reliable surgical supply companies are very cooperative and provide lenient terms for payment.

The general practitioner is primarily a diagnostician. Thus he will require instruments for examination of all the orifices and know how to use them. He needs an auroscope, ophthalmoscope, laryngoscope, proctoscope, and sigmoidoscope.

This, along with such other equipment as a haemoglobinometer, equipment for sedimentation rates, urinalysis, etc. are certainly the minimum requirements. Most general physicians find that further equipment such as mentioned above will pay for itself when carefully used.

14. WHAT ASSISTANTS, IF ANY, SHOULD BE HIRED AT FIRST? (LABORATORY TECHNICIAN, NURSE, RECEPTIONIST-SECRETARY) HOW SOON SHOULD SUCH AN ASSISTANT BE HIRED IF NOT RIGHT AWAY?

There is no agreement as to the immediate need for an assistant. However, several suggest obtaining assistance from the doctor's wife. The great majority recommend that when an assistant is hired she should be a receptionist-secretary. A trained nurse was considered unnecessary by most.

15. WHAT OFFICE OVERHEAD CAN ONE REASONABLY EXPECT AT FIRST?

The following expenses were listed by the various doctors:

Major Expenses:	*Minor Expenses:*
Rent	Telephone
Taxes	Office laundry
Fuel	Stationery
Light	Society fees
Water	Office cleaning
Drugs and supplies	Charities
Car expenses	
Secretary's salary	

Several doctors mentioned that an office in the home is much cheaper than a separate office.

16. SHOULD THE DOCTOR TAKE OUT ANY FORM OF ILLNESS OR CASUALTY INSURANCE?

Both types were almost unanimously endorsed.

17. WHAT TYPE OF OFFICE SCHEDULE DO YOU RECOMMEND AND WHY? (SET OFFICE HOURS DAILY OR CONSULTATION BY APPOINTMENT)

In small towns or villages, the recommendation is to start with office hours. Some recommend a change to the appointment system only later on. In large centres, one apparently should start immediately with consultation by appointment.

Much can be done by the general practitioner to regulate his working hours, regardless of location. This is largely in his own hands. Most patients are anxious to cooperate and to respect the doctor's wishes regarding appointments, office hours, etc.

18. WHAT LABORATORY PROCEDURES DO YOU DO YOURSELF OR ARE DONE IN YOUR OFFICE? WHICH ARE SENT OUT TO BE DONE?

Nearly all the doctors polled do their own urinalysis, blood cell counts, haemoglobin determinations and ESR's. Nearly all send out blood chemistry determinations (especially blood sugars and NPN), Wassermans, cultures and sensitivities. The greater majority use the provincial laboratory services for the latter.

19. DO YOU FEEL THAT THE GENERAL PRACTITIONER SHOULD KEEP HIS OWN ACCOUNTS, OR SHOULD HE HIRE AN ACCOUNTANT TO DO THIS?

It was suggested that accounts can be kept uncomplicated enough that the physician or secretary can keep them with ease.

20. WHAT IS THE BEST METHOD OF COLLECTING OVERDUE ACCOUNTS? UNDER WHAT CIRCUMSTANCES, IF ANY, SHOULD ONE CALL IN THE MEDICAL COLLECTION AGENCY?

The answers were all fundamentally the same. An organized system of bills, repeated (and raised *slightly*, by some), personal telephone calls, and the final resort of a medical collection agency, was used by most general practitioners. A minority felt that medical collection agencies should never be used.

21. WHAT PERCENTAGE OF BILLS RENDERED CAN REASONABLY BE CONSIDERED BAD DEBTS?

The estimates here ranged from 0 to 40%, with the average being 10%.

22. BECAUSE THE CITY PRACTITIONER IS SURROUNDED BY SPECIALISTS, WHAT SPECIFIC LIMITATIONS ARE SET ON THE SCOPE OF HIS PRACTICE?

The first limitation which the city doctors reported was quite naturally that of major surgery. Others mentioned the lack of anaesthesia and paediatrics. The reasons for the limitations in the field of surgery mentioned by the city doctors were:

lack of training

lack of hospital affiliation or appointment

limit on the procedures to be done by the general practitioner imposed by hospital administrations

public definitely more specialist minded.

23. WHAT PERCENTAGE OF YOUR PRACTICE IS SPENT IN THE MANAGEMENT OF FUNCTIONAL ILLNESS? (ANXIETY STATES)

There was a very distinct geographical difference in the answers given to this question. The average percentage given by the city general practitioners was almost forty percent, whereas the average given by doctors in the smaller centres was approximately twenty percent. There was a wide individual variation for all ranging from five to seventy-five percent. As well as being important to the prospective family doctor, the above figures are a rather interesting commentary on country versus city life.

Here is an interesting difference between country and city general practice. It is probably true that the more the doctor searches for anxiety states, the more often will he find them. Also, the number will increase as the doctor gains experience.

24. HOW DO YOU TREAT THE AVERAGE ANXIETY STATE? DO YOU FEEL YOU HAVE ADEQUATE TIME TO TREAT SUCH CASES?

Neither the city nor the country man reported that he had enough time to deal adequately with these problems, but the city practitioner seemed to be more aware of them than his country counterpart. The treatment ranged widely as would be expected. A composite scheme of management taken from the answers would include:

1. A complete examination to exclude organic illness.
2. A definite series of appointments in order to deal with the problem in an organized manner. The first appointment might be up to one hour long.
3. A realization of the limitations by the physician with referrals to a psychiatrist when necessary.

Worried people rarely unburden themselves in a hurried consultation. The doctor can deal with them more quickly if he knows the pattern of the the patient's past illnesses and recoveries. The occasional doctor cannot handle emotional problems well as their consideration seems to disturb his own personality. If so, he should refer them to another doctor.

25. WHAT PERCENTAGE OF YOUR PRACTICE ARE THE FOLLOWING?
(Average percentage range in brackets)

	City	*Rural*
MEDICINE	52% (25–75%)	40% (20–65%)
MINOR & EMERGENCY SURGERY	5–6% (0–15%)	10% (2–20%)
MAJOR SURGERY	1% (0– 5%)	5% (0–15%)
PAEDIATRICS	13% (0–25%)	14% (0–25%)
OBSTETRICS & GYNAECOLOGY	15% (0–40%)	14% (0–25%)
EENT PROBLEMS	5% (0–15%)	6% (0–14%)
ANAESTHESIA	4% (0–30%)	11% (0–50%)

26. WHAT SURGICAL PROCDURES DO YOU THINK THE GENERAL PRACTITIONER IN YOUR GEOGRAPHICAL LOCATION SHOULD DO?

Roughly forty percent of country family doctors felt that only minor surgery should be done, while the remainder felt that general practitioners should be allowed to do some major surgery but only if they were competent. In the city, only one man felt that the general practitioner should do any major surgery.

27. ARE YOU ENGAGED IN ONE OF THE FOLLOWING POSITIONS WITHIN A GENERAL PRACTICE?—A. CORONER; B. M.O.H.; C. INDUSTRIAL POSITION. COMMENT ON THE SPECIFIC VALUE OF SUCH A POSITION.

Very few of the doctors polled included any of these positions in their practice. None were coroners, one was a M.O.H., and the rest had industrial positions. Specific values mentioned for these positions were as follows:

1. Gave a specific basic income at start.
2. Gave contact with possible future patients.
3. Added income.
4. Opportunity to see a wide variety of normals when doing physical examinations in industrial work.
5. Added prestige within the community.

A position not specifically mentioned in this questionnaire which received a lot of the above comments was insurance work.

Disadvantages of the above positions mentioned:

1. Great amount of paper work required.
2. Poor payment.
3. Too much time required from other practice.

ADDITIONAL COMMENTS

Additional comments were requested and some of the more interesting ones are quoted herewith.

"Have a good partner or die young."

"I'm milked."

"Seeing MD's compete in larger centres makes a smaller centre look even better."

"The two essentials for a GP are:

1. *Kindness* to his patients. Kindness and sympathy will win more friends and patients than anything else.
2. *Absolute honesty* with his patients. They should feel that their family doctor will not recommend expensive or unnecessary work unless it is absolutely essential, and that if their problem is beyond him, he will not hesitate to call a consultant."

"I look back over my years of practice with the greatest satisfaction and

would not trade general practice for any of the specialties. Even if I were to pop off tomorrow with coronary, the disease which carries off most of us, I would say today that my life has been a full one and a happy one, like that of all good general practitioners."

REMARKS

Obviously, this survey is by no means complete: the section on office and financial matters is a mere token. However, we hope that it has been a stimulating introduction to the prospect of a life in General Practice. A list of references for further reading on the subject has been included.

The subject of general practice has its own topics like any other subject. Many of these cannot be included in any particular field of the curriculum. This is true even though undergraduate medical education aims to provide a solid framework of fundamental principles.

As a result (and this is unfortunate) we cannot produce a good family doctor until we get him away from the hospital nursery. We cannot think of this happening to any doctor without several years of seeing patients under varied conditions and of thinking for himself.

What are some of the basic facts and experiences of general practice that the medical student and interne may not have met?

A knowledge of what is normal in individuals, families and communities, both physically and psychologically.

An appreciation of the normal course of disease.

A recognition and rapid disposal of trivial complaints, and a recognition of the apparently trivial complaints that indicate serious physical and mental disease.

The management of minor illness.

The management of emergencies in the home.

The management of old people.

The management of chronic and incurable illness.

The extent and importance of family counselling.

The impact of illness on the relatives.

The value and use of social service agencies.

An understanding of the medico-legal aspects of general medical practice; of doing insurance examinations; of the certification of patients with mental disorders, and of dealing with such organizations as the Workmen's Compensation Board and Medical Welfare Plans.

Of course, this knowledge can be acquired by a doctor launching alone into general practice. You may say that much of it is common sense. Nevertheless, this is a slower and more painful way than if he works for a period with an older practitioner. It used to be that the family doctor could learn leisurely through experience. But the tempo has increased so that today the public looks for a higher quality of family health service from the beginning, and is rather entitled to it. The public today wishes a personal physician or family doctor for guidance through the maze of modern medicine. With the curative powers of the able general practitioner expanding every day, there is an enormous field for family medical practice. With competence in its technical aspects, and with understanding of people, both sick and healthy, his work can be very satisfying.

BIBLIOGRAPHY

1. Truman, S. R.: The Doctor; Williams and Wilkins, Baltimore, 1951.
2. Pinsent, R. J.: An Approach to General Practice; Livingstone, Edinburgh, 1953.
3. Taylor, S.: Good General Practice; Oxford University Press, London, 1954.

ANALYSIS OF A GENERAL PRACTICE

B. HALLIDAY, M.D

FOREWORD This is an analysis of the general practice of Dr. Harold M. Taylor and Dr. Bruce Halliday in the village of Tavistock (pop. 1100) and the surrounding rural area, situated in Western Ontario. It covers the period February 1, 1954 to January 31, 1955. Dr. Halliday graduated from Toronto in 1951.

Office and House Calls

Type of Illness	*Feb.-Mar.-Apr.*	*May-June-July*	*Aug.-Sept.-Oct.*	*Nov.-Dec.-Jan.*	TOTAL
Well Baby	241	171	174	216	802
Sick Baby	368	488	483	574	1913
Ear-Nose-Throat	340	315	342	372	1369
Respiratory	240	196	189	352	977
Cardiovascular	284	256	213	223	976
Gastrointestinal	187	249	253	223	912
Obstetrical	196	192	253	256	897
Dermatology	171	181	250	193	795
Functional	230	184	200	181	795
Traumatic	93	204	205	153	655
Orthopedic	81	67	94	117	359
Gynecology	95	71	91	94	351
Surgical	68	82	80	112	342
Neurological	103	82	88	65	338
Genito-Urinary	72	62	68	80	282
Arthritic-Rheumatic	61	84	51	54	250
Endocrine	23	40	49	31	143
Ophthalmology	18	44	37	34	133
"Check-up"	34	40	53	29	157
Communicable (incomplete)	15	36	13	20	84
Injections (liver, B_{12})	36	80	62	30	208
House Calls	841	721	742	912	3216
TOTAL OFFICE AND HOUSE CALLS	2582	2619	2383	2841	10825

Surgery

Tonsillectomy and Adenoidectomy	40	Cauterization Cervix	4
Appendectomy	14	Vein Stripping	4
Hernia	8	Hemorrhoidectomy	3
D. and C.	8	Cystoscopic	3
Biopsy and Cauterization Cervix	7	Burns	3
Sebaceous Cysts	8	Excision of Toenail	3
Cholecystectomy	5	Amputation of Finger	3
Hysterectomy	4	Salpingectomy	2
Transurethral Prostatectomy	5	Adult Circumcision	2
Breast Abscess	5	Bowel Resection for Carcinoma	2
		Skin Graft	2
		Ankle Joint—open reduction	2

Cataract	2
Antrostomy	2
Biopsy Lump in Breast	2
Tendon Repair	2
Nephropexy	1
Lumbar Sympathectomy	1
Radical Mastectomy	1
Below Knee Amputation	1
Toe Amputation	1
Pilonidal Sinus	1
Fistula-in-ano	1
Pelvic Laparotomy	1
Tendon and Nerve Repair	1
Squint	1
Exploration Femoral Artery	1
Nasal Polyp	1
Pancreatic Cyst	1
Ileostomy (Ulcerative Colitis)	1
Ovarian Cysts	1
Orchidectomy	1
D&C, CofC and Biopsy	1
Strangulated Hernia	1
Ganglion (excision)	1
Drainage Pelvic Abscess	1
Laparotomy	1
Bronchoscopic for Foreign Body	1
TOTAL SURGICAL PROCEDURES =	167

Fractures

Ribs	9
Ankle	6
Hip	5
Clavicle	5
Radius	4
Tibia	4
Surgical Neck-Humerus	2
Thumb	2
Finger	2
Humerus	1
Fibula	1
Supracondylar-Humerus	1
Patella	1
Osteochondritis of Tarsal Scaphoid	1
Metatarsal	1
Tarsal Scaphoid	1
Carpal Scaphoid	1
1st Cuneiform	1
Tarsal Bone	1
Femur	1
Metacarpal (greenstick)	1
Radius and Ulna	1
Intercondylar of Humerus	1
Radius, Ulna & Humerus	1
Os Calcis	1
Coronoid of Ulna	1
Dislocated neck	1
TOTAL FRACTURES =	57

Obstetrics

Occiput-anterior	89
Occiput-posterior	4
Breech	5
Twin Pregnancy	1
Caesarean Section	1
Erythroblastosis Foetalis	2
TOTAL =	102 CASES

Spontaneous Abortion	12
Incomplete Abortion	3

Medical diseases

(seen as new cases between Feb. 1/54–Jan. 31/55)

Pneumonia	24
Duodenal Ulcer	17
Cerebro-vascular accidents	15
Infectious Hepatitis	13
Coronary Thrombosis	5
Diabetes Mellitus	3
Tuberculosis	3
Pulmonary Embolism	2
Rheumatoid Arthritis	2
Epilepsy	2
Pernicious Anemia	1
Reiter's Syndrome	1
Rheumatic Fever	1
Acute Ulcerative Colitis	1

Cancer

(seen as new cases between Feb. 1/54–Jan. 31/55)

Rodent Ulcer	5
Carcinoma Breast	2
Carcinoma Prostate	1
Carcinoma Sigmoid Colon	1
Carcinoma Transverse Colon	1
Carcinoma Colon (not proven)	1
TOTAL =	11

GROUP PRACTICE

M. M. FISHER, M.B.*

A YOUNG graduate medical doctor finishing his interneship and contemplating entering the field of general practice will be giving much thought to the entry into that field. He will have to make a choice between solo practice and practising with associates in partnership or group. A partnership of two men is a junior form of group practice and is only of interest in this discussion because in a growing community it is sure to develop into a group, small, medium or large. The ideas and opinions expressed here refer, for the most part, to a medium-sized group of 6 to 10 men, one or two of whom may be trained to do special work but all of whom are doing general practice. This is probably the ideal group but its practicability depends upon the size of the community.

First, I would like to enumerate some of the fundamental factors necessary to successful group practice:—

1. Compatibility of temperaments among component members.
2. Mutual respect, mutual trust, personal integrity and professional honesty.
3. Professional capability.

The first two are essential because in their absence a group would fall flat before it was well under way. The higher the degree of professional capability, the more successful the group should be.

A resumé of some of the problems, advantages, and disadvantages if any, in group practice may be helpful:

The young doctor starts with an assured income, without having to buy a practice, invest in costly equipment, take financial risks or assume worrisome responsibility. He may think the income to start is rather inadequate. It may take a little while to understand that to net the equivalent in solo practice, he would have to collect in "cold" cash double the amount of his wages. When he is able to view things in true perspective and to appreciate costs and overhead, he is more likely to be satisfied and to realise that the only way to get anywhere in a group is to do what all the others are doing; working hard, pulling their weight and contributing everything they have to the common effort. Compensation will eventually be based on the success of *his* efforts.

The thing that wears down, frustrates and burns out the solo practitioner is the loneliness of his position and carrying the whole load of responsibility. In the group, there is always an associate available for advice, consultation, discussion and carrying part of the responsibility. This is probably the greatest comfort of group practice.

The most successful G.P.'s combine the Art with the Science in medical practice and balance the two nicely. To some men, this comes naturally but in any event the young men can be greatly assisted by the older man who in years of experience has learned how to handle human nature in most of its forms.

The advantages aren't all for the younger man. The Chief himself, and, as a matter of fact, all the older men in the group, should be alert and willing to learn from the boy who is just out of school and hospital and always has

*Gravenhurst, Ontario.

something new that his elders haven't yet seen or heard.

In solo practice, many men get worn out mentally and physically too early in life and become too tired to do good work. In group practice, men should live longer, should arrive at the age when they want to relax, but not retire, in better physical and mental condition. They should be content to see the younger men whom they have fathered, building up nice practices of their own while theirs' diminish. At the same time, they should be useful and wanted members of the group with something to contribute right up to old age, barring ill-health. Geriatrics is a great worry to younger men. Better understood from personal experience, it is this group of patients that the older man can continue to serve while he himself ages.

The solo practitioner who takes ill for a few months is in a bad way. His practice can disintegrate rapidly and the economic loss can be a disaster. If he were in a group, the work would go on, probably not as well or smoothly but at least his interests would be protected by the other members who are interested in the group's welfare as well as his.

The economics of group practice should be sounder. With the increase of numbers in the group, overhead should decrease not only in office expense but in operating expense, cars, etc. The only probable exception to this is in the small group operating under more difficult conditions where hospital facilities are not so good or so readily accessible.

Group practice offers facilities for more postgraduate work. It would be utterly impossible for the majority of men practicing solo to leave the responsibilities of their practice often or long enough to do 200 hours of postgraduate work every two years. In group organization, it is almost always possible to arrange for the absence of one man at a time.

Good group organization involves the apportioning of time so that every member is assured of some leisure time when he can be completely free of the practice. Night work can be better organised. Usually the younger men are willing to assume this responsibility, at least for ordinary call work. Also, there will always be somebody on call and available without too much delay, day or night, and this is a great comfort to patients and the public at large.

In the larger group, the monthly staff meeting is a great source of pleasure and profit. The group members have a chance to review together the interesting cases of the month, pool their thoughts and conclusions and out of the discussion much good may come. Also, it gives anyone a chance to air a grievance and assures a happy and contented group.

In any successful group, each doctor has his own practice within the practice; a clientele who look to him for their medical care. In actual practice, he will find that about the only circumstance when they are loath to accept another member of the group, is for a confinement. When a woman engages a doctor for that purpose, it is he whom she wants and not a substitute. However the majority of people are fairly understanding and for sufficient reason will accept another member of the group. However, each doctor must take care of his own obstetrical practice as far as possible.

With the allottment of time for leisure, it inevitably follows that some patients are going to come in or call for attention and will have to be attended by someone who is on duty. This makes it a little difficult to maintain continuity of contact with patients

and to know everything that has gone on in one's absence. This is one of the disadvantages but can be overcome with a little care.

In summary, there are some men who should never practice in a group: the rugged super-individualist, the temperamental one who frequently "blows his top" or anyone given to jealousy or suspicion. These people will probably never adjust themselves to group effort. The young man who wants to practice in a group must realise from the start that it will take three to five years to satisfy himself and his confreres that they can continue to work amicably together for the rest of their lives. At the end of this three to five year period, he is going to have to buy his way into the group either by cash or work. At times he may feel he is being insufficiently paid or being imposed upon. These grievances are illusions for the most part and can be quickly dispelled by frank discussion. I think in due course he will conclude that the advantages far outweigh the disadvantages and he will be happy to contribute his best effort in anticipation of the time when he will be one of the senior members of the group.

INTERNESHIP TRAINING FOR GENERAL PRACTICE

FOREWORD This is a statement recently issued by the Committee on Interneship Training of the College of General Practice of Canada.

THE College of General Practice of Canada is pressing for more than the usual one-year rotating internship as preparation for general practice. It advises a second year. However, in urging our prospective general physicians to take another year's hospital training the College feels the interneship training must be different from that leading to a specialty. It has serious misgivings about some of the features of another year of formal training in teaching hospitals.

The Committee on Interneship Training of the College has given considerable thought as to the type of interneship required for general practice, and from its discussions several conclusions seem justified.

A second year interneship should provide additional experience and responsibility in those branches of medicine which are of primary importance to the general practitioner.

The Committee on Interneship Training for General Practice introduces the following recommendations:

> That hospitals having interneship training facilities and training programs provide special training for doctors planning to do general practice.
>
> (a) That the usual first year rotating internship is required.
>
> (b) That a second year interneship or residency be arranged to provide the following subjects or their equivalent:
>
> Three months medicine, including dermatology.
>
> Three months obstetrics and gynaecology.
>
> Three months general and emergency surgery and fractures, E.N.T., and urology.

One month anaesthesia.
Two months paediatrics. If unavailable, four months each in medicine and obstetrics and gynaecology.

(c) That a preceptorship program be included or to follow immediately.

(d) That the second year be recognized as a residency or assistant residency, and that a suitable certificate be presented to the trainee for satisfactory completion of the training.

Although this specific program is outlined, it is to be considered flexible, depending upon the special needs of the individual and the community in which he intends to practice. For instance, in some large cities much less surgery is being done by the general practitioner than formerly, whereas in the rest of Canada he will continue to do much of the surgery. This raises the question whether regulations for a second year interneship should be on a national or sectional basis, to meet the varying needs of the different parts of the country.

It was agreed that preceptorship experience is one of the best introductions to the work of general practice. By working with a busy senior general practitioner, the interne would learn not only more of the practical application of his techniques, but also how to set up and conduct an office, and how to deal with patients in the office and in their homes. It was felt that a minimum of one month should be devoted to this, either during the second year interneship or immediately following it. The interne would see patients only with the preceptor, and in no sense would he be an assistant or locum tenens. The College of General Practice is prepared to assist with the preceptorship programs.

A number of Canadian hospitals have residencies in general practice. In general we approve of them. We wish to bring them to the attention of internes progressing to general practice. Full details of their training programs with their payment schedules may be obtained from the director of the program or from the administrator of the hospital.

We appreciate the help of these hospitals in working out a second year of interneship for general practice. We wish to assist them in this. Also, we are asking all interested hospitals to give us further aid in standardizing this program.

The following hospitals have residencies in general practice:

1. Post-Graduate Committee of Dalhousie University.
   Four residencies. Interne training includes:
   3 months medicine at Camp Hill D.V.A. Hospital.
   3 months obstetrics in 2 Charlottetown hospitals.
   3 months paediatrics in Children's Hospital, Halifax.
   3 months surgery and minor surgery in New Glasgow hospitals.
   Applications made to:
   Executive Officer,
   Post-Graduate Committee,
   Victoria General Hospital,
   Halifax.
2. Saint John General Hospital, Saint John, N.B.
   Write to Dr. Carl R. Trask, Director.
3. Royal Victoria Hospital, Montreal, Quebec.
   Six residencies beginning in June each year. The first and second

year's training are planned as one course.

Information may be obtained from:
Dr. J. Gilbert Turner,
Executive Director.

4. Ottawa Civic Hospital, Ottawa, Ontario. A one-year senior rotating interneship and a two-year senior rotating interneship.

   Information may be obtained from:
   D. H. Featherstone,
   Secretary, Interne Committee,
   Ottawa Civic Hospital.

5. The Peterborough Civic Hospital, Peterborough, Ontario.
   One resident and 3 assistant residents.

   Information may be obtained from:
   Dr. L. J. Calvert,
   Secretary,
   Interne Training Committee.

6. Toronto East General and Orthopedic Hospital, Toronto, Ontario.
   Two residencies.

   Applications made to:
   Mr. W. E. Leonard,
   Superintendent.

7. The General Hospital of Port Arthur, Port Arthur, Ontario.
   Residencies in General Practice are being considered.

   Information may be obtained from:
   Mr. J. A. McNab,
   Administrator.

8. Regina General Hospital, Regina, Saskatchewan.
   Residencies available.

   Applications may be made to:
   Dr. M. G. Israels,
   Director, Medical Education,
   Regina General Hospital.

9. Royal Alexandra General Hospital, Edmonton, Alberta.
   Residencies available.

   Information may be obtained from:
   Dr. D. R. Easton,
   Superintendent.

10. Calgary General Hospital, Calgary, Alberta.
    Four residencies. This may be increased.

    For information write to:
    Dr. L. O. Bradley,
    Administrator.

11. Holy Cross Hospital, Calgary, Alberta.
    Residencies available.

    For information write to:
    Dr. John B. Corley,
    Chairman.

12. Hôpital de l'Enfant Jésus, Quebec, P.Q.
    Senior rotating interneships available in General Practice.

    For information write to:
    Dr. C. A. Gauthier,
    Chairman, Committee on Interneship.

13. Hôpital du St-Sacrement, Quebec, P.Q.
    Senior rotating interneships available in General Practice.

    For information write to:
    Dr. R. Lemieux,
    Medical Director.

SUMMER INTERNESHIP IN PUBLIC HEALTH

H. A. WHITE, B.A., 5T5

IN continuing the programme of offering a summer fellowship to a student about to enter the final year of medicine at the University of Toronto, the Ontario Provincial Department of Health on recommendation of the Department of Hygiene and Preventive Medicine, University of Toronto, decided to choose a foreign student for a summer's interneship in Public Health. The Department designated that he spend one month with the East York-Leaside Health unit, another month with the Department of Health, City of Toronto and a final month with the Department of Health, City of Hamilton. This fellowship was gladly accepted as an invaluable opportunity of gleaning first-hand information about the practice of public health in Ontario, since such an experience is bound to assist one in the practice of medicine in a country where public health measures are yet to reach standards that prevail in Canada.

Certainly, the medical student in the lecture room might complain that lectures in Hygiene and Preventive Medicine are dull but this summer's experience should make him realize that he might be well warned that preventive medicine is one of the most important aspects of the medical curriculum. The general practitioner both as a family physician and as a prominent community leader has a very important part to play in promulgating Public Health measures. This paper will attempt to recall some of the highlights of a very rewarding summer.

Food Control

A great deal of time was spent in the Department of Food Control in each of the above mentioned centres. For example, in the City of Toronto, during July, one and a half weeks were spent in this department. One learnt that there are approximately 1,800 eating establishments in Toronto that have to be inspected from time to time by well trained and qualified personnel. Even before a prospective proprietor of an eating establishment is given permission to cater to the public, his plans for such an establishment have to be approved by the health authorities. In the company of sanitary inspectors, several routine inspections of restaurants and other eating establishments were made, paying particular attention to the general sanitation of the immediate surroundings of each establishment, the condition of the floors, ceilings and walls, the measures for cleaning and sterilizing utensils, the toilet conveniences, the storeroom and refrigerating facilities, etc. On other occasions, the inspectors took swabs from eating utensils and forwarded them to the laboratory where tests were made for bacterial counts.

Veterinary surgeons, who are also qualified sanitary inspectors, were responsible for conducting more than twenty tours of Ontario dairy farms that supply milk to the province. The general sanitation of barns and their immediate surroundings, milking utensils, apparatus and refrigeration facilities was noted. Visits were also made to dairies, ice cream factories, abattoirs, meat packing and processing plants.

Mention can only be made of visits to breweries, soft drink factories, bakeries, fish houses, groceries, butcher stores, poultry slaughtering plants and of market inspection.

Quarantine and Communicable Disease Control

In this department, one saw what is being done regarding isolation and quarantine in cases of communicable diseases, such as scarlet fever, dysentery, mumps, chicken pox and poliomyelitis, especially in private homes.

Private physicians have free access to use the various provincial laboratories for diagnostic aid. Quite an exhaustive tour was made of the Christie Street Provincial laboratory in Toronto, and another of the laboratory of the Toronto Department of Health, when several diagnostic tests were demonstrated by trained technicians. These tours proved to be short reviews in bacteriology.

Sanitation

GENERAL Here one was confronted with a variety of public health problems. Many and varied complaints come into a health unit or department daily to be sorted out and dealt with. At one moment, investigation was being made of a rooming house for overcrowding, for inadequate toilet facilities or for insufficient lighting and ventilation. At another time it was an industrial plant or a nuisance complaint, then one might move on to a barber shop or hair dressing parlour. Visits were made to cleaning and pressing establishments, laundries, second-hand clothing shops, pet shops, to swimming pools and to beaches.

RODENT CONTROL Inspection was made of premises infested with rats and methods of eradication and prevention were recommended by the inspector responsible for this task. Fumigation of infested premises has to be supervised by the health authorities.

PLUMBING AND DRAINAGE In the City of Toronto, plumbing and drainage inspection is under the direct control of the Department of Health. Plumbing inspectors have to perform various tests on the plumbing and drainage of newly constructed buildings or on repairs of such installations, to ensure that there are no defects in the disposal of storm water and sewage.

WATER PURIFICATION Conducted tours were made of water filtration plants, garbage dumps, incinerators and sewage disposal plants. Certainly it was wonderful to learn of the meticulous way in which the water supply (of, for example, the City of Toronto) is purified by the method known as superchlorination. How often does one pause to think that were it not for this planned Public Health measure of water purification in a city, people would be exposed to numerous epidemics of diseases resulting from water-borne bacteria.

Medical Services and Public Health Nursing

In the company of public health nurses, several visits were made to private homes. On one occasion, the object of the visit was to assess the suitability of an infant boarding home before a license could be granted. On another, it was to advise on the tuberculosis aftercare of a patient recently discharged from sanatorium. Yet another was a visit to a mother and her newborn offering assistance in the form of useful advice; e.g. the proper feeding of the child and about immunization. It was rather pleasing to note the large attendance of parents with their young ones at Well-Baby Clinics, and also at clinics for immunization against diphtheria, whooping cough, tetanus and smallpox. In Hamilton, the large attendance of expectant mothers at the weekly pre-natal clinics indicated the success of this type of public health education. One's meagre skill in doing physical examinations was

not allowed to stagnate, since the student often participated in the examination of new employees for a city or the municipality involved. At the East York-Leaside Health unit about five practising physicians assisted the M.O.H. and his staff in doing mass physical examinations of boys prior to their departure for summer camps.

Venereal Disease Control

In an interview, the head of this section in the Department of Health, City of Toronto, was very pleased to report about what is being done in the field of venereal disease control. Each new case is reported by private practitioners to the Provincial Department of Health. Trained inspectors or nurses, like surreptitious detectives, have to locate contacts and advise them to seek immediate treatment. Although syphilis in both male and female and gonorrhoea in the male are being liquidated by the use of Penicillin, it was surprising to learn that gonorrhoea in the female is still a problem to be surmounted.

Tuberculosis Control

Two days were spent at the Mountain Sanatorium in Hamilton, during which time the methods and measures being used for the treatment of pulmonary tuberculosis and tuberculous meningitis were observed. At one of the staff conferences of this famous institution, Dr. Leigh Forsythe, a renowned Australian specialist in tuberculosis who was on a world tour, commented on the fact that Canada was in the forefront in her methods of early detection, treatment and therefore prevention of tuberculosis.

It was also interesting and educational to attend chest clinics in Hamilton where the private physician could send his cases for chest x-ray or for tuberculin skin tests.

Dental Services

The preservation of the child's teeth and the prevention of dental caries are also important aspects of the work of a department of health or a health unit. Such a programme is under the direct control of a qualified dentist, who might also possess a Diploma in Dental Public Health. One enjoyed the privilege of seeing dentists and associated staff doing their share of public health work.

Mental Health

Toronto was host this summer to an international gathering of men and women interested in the mental health of all peoples. This knowledge enthused one's interest in child guidance clinics and in other aspects of mental health. Teams of psychiatrists, psychologists, nurses and office assistants all work together aiming to prevent mental illnesses in the child and in the adult. Such a team (with particular reference to that observed in Hamilton) is doing a commendable job not only in helping people with mental health problems, but also in the field of education by lecturing to nurses, to various young people's groups and to other organisations on mental health.

Statistical Services

One found the various departments of statistics well staffed and organized to deal with the countless data that must be properly sorted, recorded and filed. Of course, their statistics relating to births, morbidity and mortality are of vital importance. They serve as yardsticks, indicating the effectiveness of public health measures.

Liason with other Departments and Organizations

These health departments all work in liason with various other organizations, e.g. voluntary groups such as the

Women's Auxiliary, and the Department of Public Welfare. At the East York-Leaside Health Unit, one could admire the way in which the Department of Public Welfare and the health unit worked together for the benefit of an individual e.g., in a case when the M.O.H. approved the housing arrangements for a patient discharged from the tuberculosis sanatorium, the welfare department would supply an allowance if needed.

Impressions

The programme as outlined in the above synopsis permits one to conclude the following:

1. The people of a healthy nation are bound to be associated with the practice of public health from the prenatal stage to the grave.

2. More and more, it is being emphasized that health is not only physical, but also economic, mental and therefore spiritual well-being. Therefore, we endeavour to prevent bodily illness by our immunization programmes, measures of sanitation, water purification and food control; we aim at preventing mental illnesses by our child guidance and mental health clinics and programmes; and we try to prevent economic embarrassment of the individual which in itself can lead to both physical and mental illnesses, through the efforts of our welfare and social services.

3. In Canada, (with particular reference to Ontario) a standard is being set in the practice of public health that other nations, may do well to emulate.

Finally gratitude must be expressed to those doctors, nurses, veterinarians and associated personnel who so kindly contributed to an extremely invaluable summer.

ELEMENTARY ASPECTS OF PENICILLIN

A. C. STRICKLER, 5T8

FOREWARD As the title indicates, this article constitutes some introductory information on Penicillin for the benefit of students in the junior years.

THE discovery and refinement of Penicillin probably constitute one of the greatest medical advances of the half century. The chance situation which brought a stray spore of mould to the attention of Sir Alexander Fleming in 1929; the lack of scientific interest in his discovery for almost ten years; the rebirth of the drug in 1938; and the remarkable curative powers exhibited by Penicillin thereafter: all of these aspects have been so widely told that they are common knowledge to the layman. This discussion will deal with some of the early investigations and with the status of Penicillin to-day.

Investigation of Chemical and Physiological Properties

Among the earliest investigations were those concerning the general chemical properties. It was established that Penicillin was a fairly strong acid, soluble in dilute acids and alkalies, ether, acetone, dioxane and ethylacetate, and slightly soluble in halogenated hydrocarbons and benzene. It was unstable and readily inactivated by water, light, heat, heavy metal ions, oxidizing agents, and penicillinase. It formed salts which could be amorphous or crystalline. Considerable variation, how-

ever, was found among the different kinds of Penicillin.

Scientists were aware of the antibacterial property of Penicillin, but their early experiments had been conducted *in vitro*. The major problem was the possibility that the drug might have a harmful effect on human tissues. Investigations were first directed toward mice. Animals weighing twenty grams were given intravenous injections of twenty milligrams of Penicillin which contained 325 Oxford Units per milligram.* The animals supported these injections without the slightest reaction, and it was found that to kill a mouse of this size, thirty milligrams of 250 Units per milligram of sodium salt of Penicillin had to be injected. The investigators concluded that if thousands of Oxford Units were needed to kill a mouse, then hundreds of thousands should not harm a human being.

Soon attention turned to human subjects to determine the reaction, if any, produced when Penicillin was injected into the blood and tissues. Human blood was mixed with a solution of Penicillin containing forty Oxford Units, and was not affected. Particular significance lay in the fact that the white corpuscles were not damaged. Since they are the body's defenders against infection, any drug that might harm them must be discarded. Further experiments followed with muscular, fibrous, and epithelial tissues, but none of these was damaged by the drug. In addition, such functions as blood pressure, heart beat, and respiration were not hampered when Penicillin was administered. The question of Penicillin's possible toxicity in human beings had been answered: it could be injected into the blood and tissues without adverse effects.

Still another question faced the investigators. What was the fate of Penicillin after injection into the human body? It was learned that Penicillin's antibacterial activity was not diminished when mixed with blood, pus, tissue extract or bile. This was vitally important, for it appeared, that within the body, Penicillin was very stable. Further, it was discovered that Penicillin did not remain in the body for long, but was eliminated by the kidneys. This indicated that Penicillin remained practically unchanged all the time it was in the body because only substances that are not destroyed by physiological processes are discharged quantitatively by the kidneys. This fact naturally opened up speculation about recovering the drug from the urine. At the same time, it raised the problem of maintaining the proper concentration of Penicillin in the blood stream and the frequency of injections necessary for this.

The action of Penicillin seemed to be more bacteriostatic than bacteriocidal, for even in strong concentrations it did not actually kill the organisms, but inhibited their growth and reproduction. It appeared that when Penicillin was injected into the blood stream, an alliance was set up between it and the white blood cells. Penicillin slowed the growth and reproduction of the microbes, thus weakening their resistance and vitality, and making them easy prey for the leucocytes.

Penicillin Today

One of the most important clinical problems concerning Penicillin today is related to the choice of dosage for its systemic use. Oral Penicillin in the buffered tablets of the sodium or potassium salts is well absorbed, but it is only about 10 to 30 per cent efficient

*The Oxford Unit is defined as the Penicillin activity which will prevent the growth of Staphylococcus aureus over an area of 26 mm. diameter in 50 ml. of a standard culture medium.

so that three to ten times the intramuscular dose is necessary to achieve the same therapeutic effect. There are four common methods of administrating Penicillin:

1. Administration by mouth is impossible since the acid juices of the stomach destroy the drug. However, since Penicillin is absorbed by the small intestine, administration in a small capsule protecting the drug through the stomach is feasible.

2. Local application in liquid, aerosol or dust forms is useful for some skin infections, wound contamination, etc.

3. Administration by injection either intramuscularly or intravenously is the most common procedure.

4. Lozenges and troches to be held in the mouth are used in the treatment of Vincent's infection, pharyngitis, and tonsilitis.

The term Penicillin today really has little meaning except in a very broad sense because numerous forms are available each having a slightly different activity and therapeutic effect. Hence, qualification is necessary. Penicillin G remains the most important form that has been synthesized. Because it is excreted more slowly by the kidney, Procaine Penicillin G prolongs the effective concentration of the drug in the blood. Penatin or Penicillin B is active against both Gram-positive and Gram-negative* bacteria, but glucose and oxygen must be present for it to be active. Penicidin is also effective against Gram-positive and Gram-negative bacteria. Penicillic acid, although being active against these bacteria, has the disadvantage of being toxic to animal tissues. Penicillin O is similar in action to Penicillin G, but fewer people show sensitivity to it. In addition, there are Penicillins F, K, and X according to the American classification.

Commercial Penicillin may contain one or more of the above Penicillin types in varying proportions. Since the various kinds of Penicillin have different activities, the introduction of the pure crystalline form constituted a great advance. The crystalline salts are free from many toxic impurities that often occurred in earlier amorphous Penicillin products; hence, massive doses may be given with few reactions such as those encountered in sensitive persons. Other advantages of the purified crystalline Penicillin over less pure amorphous mixtures are: less irritation, absence of local pain or reaction at the site of injection, certainty of full therapeutic effect, and greater stability of preparations. In addition, dry crystalline products may be kept without refrigeration for three years.

In approaching the problem of dosage and the choice of a parenteral form of Penicillin for the treatment of infections with organisms that are only slightly or moderately sensitive, one must consider:

1. The nature of the lesion, particularly with respect to the accessibility of the organisms within that lesion to Penicillin reaching it from the blood.

2. The density of the bacterial population at that site.

3. The possibility of intervention of host or immune factors to aid in disposing small numbers of residual organisms.

Penicillin has now largely passed through the stages of uncertainty concerning the indications, dosage, and the methods of administration. Techniques for accurate bacteriological diagnosis,

*A differential method of staining bacteria named after its inventor, the Danish bacteriologist, Hans Gram, in which bacteria are treated with a variety of chemical reagents. Bacteria staining a deep violet are said to be Gram-positive; those taking on the contrast stain, (pink) Gram-negative.

measurement of the degree of the susceptibility of the organism, and determination of the blood level of Penicillin have been devised. Most susceptible organisms are controlled by a blood level of about 0.15 unit of Penicillin per cc. of serum. The choice of method of treatment has been briefly outlined above; the duration of treatment and adjuvant therapy depend on the individual case. By the use of substances (Procaine) that delay the excretion of Penicillin, the difficulty of maintaining effective blood levels has been overcome.

The great value of Penicillin as a wide spectrum anti-bacterial agent is indicated by the following (incomplete) list of conditions that respond to it: anthrax, gas gangrene, diphtheria, gonorrhoea, psittacosis, pneumonia, syphilis, and various infections due to staphylococcus aureus and streptococci. In addition it may be used advantageously as an adjuvant in the so-called *omnibiotics* and for prophylactic purposes in surgery.

The jubilation expressed by the world over Prontosil was repeated with the Sulphonamides and again with Penicillin. In each case, once the initial excitement was replaced by intensive investigation, disadvantages came to light. The pattern of seemingly miraculous cures, deleterious side reactions, and the appearance of resistant strains of bacteria seems to accompany each new drug discovery.

There are two main disadvantages to Penicillin therapy. The first is that administration of the drug to certain individuals is accompanied by fatal anaphylactic reactions. In an attempt to reduce deaths from this cause, the following points should be kept in mind:

1. Most patients having fatal anaphylactic reactions to Penicillin are known to have had previous injections of the drug.

2. A number of patients who die of a Penicillin anaphylactic reaction have had definite reactions of sensitivity on previous occasions when the drug was administered.

3. Patients whose illness is due to an allergic response to a sensitizing substance—as for example, those ill with bronchial asthma—should not be treated with Penicillin for fear of inducing a state of anaphylaxis to this antibiotic.

4. It would appear that as far as anaphylaxis is concerned, it may be induced by the various type of Penicillin, and that cross-sensitization to the various chemical forms of Penicillin may exist in a sensitized patient.

5. When Procaine Penicillin is used, the possibility that a serious reaction may occur must always be kept in mind.

The obvious conclusion to be drawn is that Penicillin should not be administered to patients who have had a reaction of sensitivity to it. Each patient should be carefully screened on this point before administration.

The second difficulty in the use of Penicillin, and indeed many other antibiotics, is the development of resistant strains of bacteria. This development may be increased, diminished, or prevented depending on the antibiotic therapy used. The spread of resistant strains already present may be produced by frequency of contact with susceptible hosts, or it may be prevented by a combination of proper isolation technique and host resistance.

Certain antibiotics are responsible for the development of resistant strains to a greater extent than others. Resistant forms emerge with great rapidity in patients treated with Streptomycin, Erythromycin, and Carbomycin. With other antibiotics, resistant forms do not appear so quickly or so frequently. Penicillin

belongs to the latter type; however, Penicillin-resistant types of staphylococci have emerged in great numbers until today they represent one of the major problems of antibiotic therapy. A plausible method for preventing the development of such strains would seem to be the use of two or more antibiotics simultaneously since the strain might be resistant to one antibiotic and not to another. However, such combinations have not proved very efficient. The only sure way of preventing their emergence at the present time is by the quick termination of the infection.

The fact remains, however, that Penicillin is still the most effective and least toxic agent available for the treatment of most infections which are sensitive to it *in vitro*. It is unfortunate that some of its usefulness has been reduced by excessive and unnecessarily widespread usage over the past few years resulting in the sensitization of large numbers of individuals, and, in the case of staphylococcus, the gradual elimination of sensitive strains.

ACKNOWLEDGMENT

The author wishes to thank Dr. F. R. Lorriman of the Department of Chemistry, and Dr. P. H. Greey, for their assistance and guidance in the preparation of this article.

BIBLIOGRAPHY

1. The Conquest of Disease—Penicillin, George Bankoff, M.D.: MacDonald and Co. Ltd., London, 1946.
2. Antibiotics Annual 1953–1954, edited by Welch and Marti-Ibanez.
   a. Clinical Uses of the Presently Available Antibiotics, Maxwell Finland.
   b. The Effect of the Emergence of Resistant Strains on the Future of Antibiotic Therapy, H. Dowling.
   c. Fatal Anaphylactic Reactions to Penicillin, P. H. Long.
3. Chemistry of Organic Medicinal Products, G. L. Jenkins and W. H. Hartung; John Wiley and Sons, Inc., New York, 1949.
4. Penicillin and Other Antibiotics, G. W. S. Andrews and J. Miller; Todd Publishing Group, London, 1949.

ABSTRACT AND REVIEWS

Adrenalectomy for Breast Cancer: Sir Stanford Cade, British Medical Journal, pp. 1, No. 4904, Jan. 1, 1955.

Fifty-six patients with advanced and disseminated breast cancer were selected and bilateral adrenalectomy performed. About twenty-three per cent of all cases showed remarkable improvement, and the total number benefiting from treatment was sixty percent. Relief of pain from skeletal metastases, reossification of skeletal metastases, union of pathological fractures and regression of visible and palpable lesions are reported. Survival, so far up to twenty-four months has been obtained. Risk of operation was found to be reasonable; and cortisone maintenance has been relatively simple. Although there is no likelihood of a permanent effect, the author suggests that operation might be considered at an earlier stage.

R. E. W.

Synopsis of Surgery: Hey Groves; edited by Sir Cecil Wakeley; 603 pp., $5.00, John Wright & Sons, Bristol; The MacMillan Company of Canada, Ltd., Toronto, 1954.

This synopsis of essential surgical facts was used by the reviewer for its intended purpose—as a study guide for

final examinations. It serves its purpose very well.

The format is particularly conducive to the preparation of organized examination answers. The system of headings and the use of type and indented margins enhances classification of the various conditions and "enables the reader to see the scope of the subject at a glance."

One of the features is a very adequate coverage of the general principles of surgery, a subject which is often presented rather vaguely in the larger textbooks and in lectures.

Treatment is presented in a clear and concise fashion and this is particularly true of the discussion of operative procedures.

As is the failing of all classificatory texts, this book tends to be a little all-inclusive and some of the sections on medical diseases might be considered superfluous. Surgical conditions of the hand are not presented as fully as they might be.

However, as a supplement to and not a replacement of the recognized larger texts, this book seems a very practical surgical review.

J. W. Goodwin

Studies In Tuberculosis: R. G. Ferguson, M.D. (124 pages, $3.50) University of Toronto Press, Toronto, 1955.

Dr. Ferguson's background reveals several decades of practice and investigation in the battle against tuberculosis. As a result he has gained wide knowledge and understanding of this disease and illustrates his views with considerable clinical data.

The views are not entirely his own and in many instances the author presents the opinions and clinical data obtained from other men in this field. This is well shown by the extensive bibliography employed.

Although a considerable majority of the book is concerned with clinical studies conducted in conjunction with the Saskatchewan Anti-Tuberculosis League, of which Dr. Ferguson is General Superintendent, the deductions drawn from these studies are effectively shown to apply in all areas where the control and prevention of tuberculosis is a problem.

In outline, the book presents clinical observations and studies with deductions arising therefrom, from which the author derives a cumulative concept of the nature of the disease. As a result there is considerable emphasis on infection and resistance, both native and acquired. The value of B.C.G. vaccination is well reviewed as are other methods of preventing and controlling the disease.

Undoubtedly the book is didactic but not to the extent of being pedantic. It is written for nurses and for students of tuberculosis, medicine and public health and provides a complete compendium for the practical application of a preventive programme in the community, province and country.

W. J. Kokeny

Acknowledgment is made of the receipt of the following book which will be reviewed for our first issue in the fall:

A Therapeutic Index: C. M. Miller and B. K. Ellenbogen; 148 pp., $2.50, Bailliere, Tindall and Cox, London, 1955; The MacMillan Company of Canada, Ltd.

OF CURRENT INTEREST

Medical Society

The following are to be members of the Medical Society Assembly for 1955-56:

Honorary President	Dr. J. A. MacFarlane
President	W. S. Hunter
President M.W.U.A.	Miss M. H. Stoute
Vice-President	R. L. Hooper
S.A.C. Representative	A. S. Macpherson
Treasurer	D. C. Price
Secretary	Miss G. B. Pierce
President 5T6	R. W. Jackson
5T7	G. E. Warme
5T8	S. A. Philbrook
5T9	R. F. Hull
6T0	G. R. Sellery
President M.A.A.	J. R. Wilkes
Editor, Medical Journal	J. Q. Bliss
Chairman, Daffydil	L. Silverman
Director of Public Relations	B. Stewart
Chairman, C.A.M.S.I.	I. Gollish
Chairman, Arts & Letters	Miss V. Heller
Warden	P. D. Hopkins
Sr. EAC Representative	H. M. Mills
Jr. EAC Representative	R. G. Lee
Chairman, Staff-Student Relations	W. J. McIlroy

Faculty

Dr. W. E. Gallie has been appointed an Honorary Fellow of the Royal College of Surgeons of Edinburgh.

Sir Harold Himsworth, secretary of the Medical Research Council of Great Britain visited the Faculty recently.

Professor R. M. James has been appointed an Honorary Fellow of Royal College of Surgeons of London, England.

Professor Charles H. Best has been chosen Croonian Lecturer for 1955 by the Council of the Royal Society, London, England.

A combined refresher course in Ophthalmology and Otolaryngology will be given in the Faculty from April 11th to 15th, 1955.

The Advanced Graduate Course will again be given in the Faculty from August 22nd to September 30th, 1955.

Dean J. A. MacFarlane addressed the Empire Club in Toronto on January 13th, last, the subject of his address being: *"The Modern Medical School—Its Aims and Obligations"*.

Professor R. M. James has been appointed President of the Canadian Association of Clinical Surgeons.

Doctor's Office—General Practitioner wanted for new office in densely populated Dupont-Christie area, opposite bus and street car loop.

Foreign language, especially Italian, an asset. Please phone ST 8-6085.

SUBSCRIPTION RENEWAL

Send to: Circulation Manager
University of Toronto Medical Journal
Room 114, Anatomy Building
Toronto 5, Ontario

Please send me the 1955–56 volume of THE UNIVERSITY OF TORONTO MEDICAL JOURNAL.

I enclose my cheque for $3.50.

Name: .....

Address: .....

Year of Graduation: .....

RECENT ACCESSIONS TO THE LIBRARY

March 1955

Altschul, R.: **Endothelium.** 1954.
Andrews, G. C.: **Diseases of the skin.** 4th ed. 1954.
Cleckley, H. M.: **The mask of sanity.** 3rd ed. 1955.
Council for International Organizations of Medical Sciences: **Anoxia of the new-born infant.** 1953.
Ferguson, R. G.: **Studies in tuberculosis.** 1955.
Ginzberg, E.: **Psychiatry and military manpower policy.** 1953.
Gray, H.: **Anatomy of the human body.** 26th Amer. ed. 1954.
Kitay, J. I.: **The pineal gland.** 1954.
Lovern, J. A.: **The chemistry of lipids of biochemical significance.** 1955.
Mackie, T.: **A manual of tropical medicine.** 2nd ed. 1954.
Morton, D. J.: **Human locomotion and body form.** 1952.
New York Academy of Sciences: **Nutritional factors and liver diseases.** 1954.
New York Diabetes Association: **Newer concepts of the causes and treatment of diabetes mellitus.** 1954.
Pattison, H. A.: **Rehabilitation of the tuberculous.** 3rd ed. 1949.
Rothman, S.: **Physiology and biochemistry of the skin.** 1954.
Russell, W. R.: **Poliomyelitis.** 1952.
Spencer, W. T.: **Treatment of acute poliomyelitis.** 1954.
Tracey, M. V.: **Principles of biochemistry.** 1954.
Tyre, R.: **Saddleback surgeon; the story of Murrough O'Brien.** 1954.
White, A.: **Principles of biochemistry.** 1954.

UNIVERSITY OF TORONTO PRESS

an imprint that guarantees
a product of high distinction

printers to the University

A private hospital for the diagnosis, care and treatment of all types of psychiatric disorders. An adequate staff of specialists study each patient carefully and fit the treatment to his individual needs. Excellent cuisine, comfortable accommodation and personal attention of specially trained nursing staff contribute to the recovery of the patient. All types of modern therapy are available, including Psychotherapy, Insulin and Electro-shock, combined with excellent Occupational and Recreational facilities. The Sanitarium buildings, accommodating 225 patients, are situated in a very attractive setting within the confines of the City of Guelph. Visits by physicians and other interested parties are always welcomed. For further information write or telephone (Guelph 53).

A. L. MacKINNON, M.B, Medical Supt.

THE HOMEWOOD SANITARIUM OF GUELPH, ONTARIO, LIMITED

Can you get away for some fishing, Doctor?

Or, as well as looking after a busy practice, are you doing your own dispensing with all its attendant details

keeping stock — compounding prescriptions — and bookkeeping? Prescribe through the pharmacist, your assistant trained to give you complete, dependable service in all things pharmaceutical

Precious time thus saved is better spent in other pursuits.

Good fishing, Doctor!

ONTARIO RETAIL PHARMACISTS ASSOCIATION

THE ONTARIO RETAIL PHARMACISTS' ASSOCIATION